

REMARKS

[0003] Applicant respectfully requests reconsideration and allowance of all of the claims of the application. Claims 1-11 and 13-23 are presently pending. Claims amended herein are: 1-4, 9, 14, and 19-21. No claims are withdrawn, canceled, or added herein.

Statement of Substance of Interview

[0004] The Examiner graciously talked with me—the undersigned representative for the Applicant—on August 18, 2008. Applicant greatly appreciates the Examiner’s willingness to talk. Such willingness is invaluable to both of us in our common goal of an expedited prosecution of this patent application.

[0005] During the interview, I discussed how the claims differed from the cited art, namely Snover, and whether Snover is available as prior art. Without conceding the propriety of the rejections and in the interest of expediting prosecution, I also proposed several possible clarifying amendments.

[0006] The Examiner was receptive to the proposals, and I understood the Examiner to indicate that the proposed clarifying claim amendments would not be subject to the same rejections as the then-pending claims. However, the Examiner indicated that she would need to review the cited art more carefully, and requested that the proposed claim amendments be presented in writing in this response.

[0007] Applicant herein amends the claims in the manner discussed during the interview. Accordingly, Applicant submits that the pending claims are allowable over the cited art of record for at least the reasons discussed during the interview.

[0008] Also, during the interview, the Examiner and I discussed the 112 rejections of claims 1, 14, and 19. The Examiner indicated her concern that the claims might be interpreted as reciting only a single execution element, which the Examiner found to be at tension with other features of the claims (such as "one or more previously processed execution elements"). In response, I indicated that each object-based command is associated with at least one execution element, and that *multiple* object-based commands are parsed from a sequence. Because the claims recite multiple commands, and because each is associated with at least one execution element, it follows that the claims recite multiple execution elements.

Formal Request for an Interview

[0009] If the Examiner's reply to this communication is anything other than allowance of all pending claims, then I formally request an interview with the Examiner. I encourage the Examiner to call me—the undersigned representative for the Applicant—so that we can talk about this matter so as to resolve any outstanding issues quickly and efficiently over the phone.

[0010] Please contact me or my assistant to schedule a date and time for a telephone interview that is most convenient for both of us. While email works great for us, I welcome your call to either of us as well. Our contact information may be found on the last page of this response.

Formal Matters

Claims

[0011] The Examiner objects to claims 1, 9, 14 and 19 for various informalities. Herein, Applicant amends these claims, as shown above, to correct the informalities noted by the Examiner.

Provisional Double-Patenting Rejections

[0012] Based upon co-pending applications 10/438,235, 10/882,828, and 10/693,589, the Examiner rejects claims 1, 19, 26 and 30 on the grounds of non-statutory obviousness-type double-patenting. Accordingly, Applicant submits herewith terminal disclaimers to overcome the provisional double-patenting rejections.

Substantive Matters

Claim Rejections under §112, Second Paragraph

[0013] The Examiner rejects claims 1, 14 and 19 under §112, 2nd ¶, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner indicated her concern that the claims might be interpreted as reciting only a single execution element, which the Examiner found to be at tension with other features of the claims (such as "one or more previously processed execution elements"). Applicant respectfully disagrees.

[0014] As I noted to the Examiner during our above-mentioned interview, each object-based command is associated with at least one execution element, and that *multiple* object-based commands are parsed from a sequence. Because the claims recite multiple commands, and because each is associated with at least one execution element, it follows that the claims recite multiple execution elements. Accordingly, Applicant respectfully asks the Examiner to withdraw this rejection.

Claim Rejections under §§ 102 and/or 103

[0015] The Examiner rejects claims 1-11 and 13-23 under §102. For the reasons set forth below, the Examiner has not shown that cited references anticipate the rejected claims.

[0016] In addition, the Examiner rejects claims 1-11 and 13-23 under §103. For the reasons set forth below, the Examiner has not made a prima facie case showing that the rejected claims are obvious.

[0017] Accordingly, Applicant respectfully requests that the §102 and/or §103 rejections be withdrawn and the case be passed along to issuance.

[0018] The Examiner's rejections are based upon the following references alone or in combination:

- **Snover:** *Snover, et al.*, US Patent Publication No. 2004/0243543 (published December 2, 2004);
- **Murray:** *Murray, et al.*, US Patent Publication No. 2006/0235968 (Published October 19, 2006); and
- **Young:** *Young, et al.*, US Patent No. 6,782,531 (issued August 24, 2004)

Overview of the Application

[0019] The Application describes various capabilities for resolving strings within a command string. The present mechanism operates within an interactive operating environment by receiving a plurality of strings. For any string this is partially resolved, the mechanism initiates analysis for completely resolving the string. The mechanisms support wildcarding, property sets, relations, conversions, property paths, extended types, data type coercing, and the like.

Cited References

[0020] The Examiner cites Snover as the reference in the anticipation rejections. The Examiner also cites Murray as the primary reference in the alternative, obviousness-based rejections, and Young as the secondary reference in the alternative, obviousness-based rejections.

Snover

[0021] Snover describes a technology for a computing environment and method that supports object-based pipelines. The computing environment includes a runtime shell, a parser, and base commands. The runtime shell receives an object-based pipeline (e.g., via a command line). The runtime shell sends the object-based pipeline to the parser that parses the object-based pipeline into pipeline sub-components. Each of the pipeline sub-components are associated with a command, such as a base command provided by an operating system or a third party command provided by a third party developer. The parser invokes a method that is associated with the first pipeline sub-component. The method obtains objects of interest from a specified input (e.g., XML). The objects are sent to subsequent pipeline sub-components for further processing. The objects do not have methods. The pipeline sub-components may execute in the same process.

Murray

[0022] Murray describes a technology for interacting with a managed data network entity is provided. The method includes a sequence of steps. A change in the operational state of the managed data network entity is detected. A CLI dictionary entry is retrieved from a CLI dictionary associated with the data network entity. Based on the retrieved CLI dictionary entry, CLI commands are extracted therefrom to configure the managed data network entity to reflect the detected change in the operational state. A CLI command sequence is built from the extracted CLI commands. Each CLI command in the command sequence is sent to the managed data network entity for execution. CLI command responses are monitored. Based on a successful execution of CLI commands sent, subsequent CLI commands in the CLI command sequence are sent for execution. The solution provides automated configuration management of data network entities from different vendors when SNMP is not a viable option. The automation eliminates manual CLI command entry in providing network management and service provisioning solutions, provides support for multi-vendor equipment by processing multiple CLI command vocabulary and grammar specifications in the CLI command dictionary. The solution reduces data network entity management costs, downtime, and training time for analysts. The advantages are derived from the ability to add CLI commands to the CLI dictionary providing support for new types of data network entities with human readable code greatly improving the development and maintenance of the network management and service provisioning solution.

Young

[0023] Young describes a technology for performing data processing by multiple "plug-in" processing modules controlled by an execution management framework. The framework includes an order determining mechanism that controls the plug-in processing modules to execute in series, or in parallel, to speed processing by the plug-ins while accommodating computational dependencies. In one embodiment, the order determining mechanism can include a dependency counter associated with each plug-in processing module for determining an operational sequence position of the associated plug-in processing module, and means for conditioning the count value (e.g., decrementing or incrementing the count value) in response to operation of another of the plug-in processing modules on whose output the associated plug-in processing module depends, so that the associated plug-in processing module will commence operation in the proper order when the count value reaches a predetermined value.

Anticipation Rejections

[0024] Applicant submits that the anticipation rejections are not valid because, for each rejected claim, no single reference discloses each and every element of that rejected claim.¹ Furthermore, the elements disclosed in the single reference are not arranged in the manner recited by each rejected claim.²

[0025] Additionally, Applicant submits that the anticipate rejections are also not valid by virtue of the 131 Affidavit provided by the inventors, the affidavit antedating the 102(e) date of the cited reference.

Based upon Snover

[0026] The Examiner rejects claims 1-11 and 13-23 under 35 U.S.C. § 102(e) as being anticipated by Snover. Applicant respectfully traverses the rejections of these claims. Based on the reasons given below, Applicant asks the Examiner to withdraw the rejection of these claims.

Availability of Snover

[0027] In "Response to Arguments" on pages 2-5 of the Office Action, the Examiner maintains the §102 rejections in view of Snover despite Applicant's previously provided 131 Affidavit antedating the 102(e) date of Snover. The

¹ "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); also see MPEP §2131.

² See *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Examiner maintained the rejection because she found the evidence accompanying the Affidavit to make an insufficient showing of a reduction to practice of the claimed subject matter.

[0028] In response, Applicant notes that independent claim 1 has been significantly amended. Amended claim 1 describes a technology for resolving each object-based command to a data type and, for data types that are not natively supported by the operating environment, retrieving extended information that defines the data types and creating an instance of the data types. Support for these new claim features may be found in the "Summary" section of the evidence accompanying the Affidavit. The Summary states, among other things, that "the invention provided extended object class type information" and that "the extended type information is accessed through an adapter object." This extended type information is the extended information recited in the features of amended claim 1. Accordingly, Applicant respectfully submits that Snover is not available as a reference because the evidence accompanying the Affidavit does show a reduction to practice of the now-claimed subject matter.

Applicability of Snover

[0029] Regardless of whether Snover is available as a reference, Applicants submit that claims 1-11 and 13-23 are not anticipated by Snover for the following reasons.

Independent Claim 1

[0030] With regard to amended claim 1, the Application describes a technology for resolving data types of object-based commands, including retrieving extended information for data types that are not supported by the execution environment. This description is illustrated in Figure 18 and is found at least on page 19, line 13 through page 21, line 23 and on page 60, line 10 through page 67, line 5 of the Application.

[0031] Specifically, amended claim 1 recites (in part) the following (emphasis added):

resolving each object-based command in the sequence of object-based commands to a data type; and

for data types that are not natively supported by the operating environment, retrieving extended information that defines the data types and creating an instance of the data types for each object-based command in the sequence that was resolved to one of the data types.

[0032] In contrast, Snover is not concerned with extended information, but is rather directed at a method of parsing a pipelined component into pipelined subcomponents, and executing a method associated with each subcomponent, the method taken as input an object output by a method of a previous subcomponent. Thus, an output object is passed from method to method and finally output, in a chained fashion. While Snover further mentions the determining of object properties through reflection and retrieving metadata for various object types

(paragraph 21), this discloses nothing more than the well known techniques for reflecting on an object of a data type supported by the operating environment. In this well known technique, an object is reflected on to retrieve its properties, and the object must be support by the operating environment (see page 19, line 23, to page 20, line 10 of the Application).

[0033] Snover does not disclose that any of the data types are “not natively supported by the operating environment”, that the objects require resolving to data types, the retrieving of extended information that defines the data types, or the creating of an instance of the data types. Rather, as mentioned, Snover only teaches reflecting to retrieve properties and the retrieval of metadata.

[0034] §102 rejections require that the cited reference disclose each and every element in as complete of detail as is claimed. Snover does not disclose at least the above-discussed features of amended claim 1. Consequently, Snover does not disclose all of the claimed elements and features of amended claim 1 in as complete of detail as is claimed. Accordingly, Applicant asks the Examiner to withdraw the rejection of this claim.

Independent Claims 14 and 19

[0035] Claims 14 and 19 recite features similar to those of amended claim 1. Accordingly, at least for the same reasons described above with regard to claim 1, claims 14 and 19 are patentable over Snover.

Dependent Claims 2-11, 13, 15-18, and 20-23

[0036] These claims ultimately depend upon independent claims 1, 14, and 19. As discussed above, claims 1, 14, and 19 are allowable. It is axiomatic that any dependent claim which depends from an allowable base claim is also allowable. Additionally, some or all of these claims may also be allowable for additional independent reasons.

Obviousness Rejections

Lack of *Prima Facie* Case of Obviousness (MPEP § 2142)

[0037] Applicant disagrees with the Examiner's obviousness rejections. Arguments presented herein point to various aspects of the record to demonstrate that all of the criteria set forth for making a prima facie case have not been met.

Based upon Murray and Young

[0038] The Examiner rejects claims 1-11 and 13-23 under 35 U.S.C. § 103(a) as being unpatentable over Murray and Young. Applicant respectfully traverses the rejection of these claims and asks the Examiner to withdraw the rejection of these claims.

Independent Claim 1

[0039] The Examiner cites a series of passages of Murray as teaching the parsing of a sequence of object-based commands, the associating of those commands with execution elements, and the execution of the execution elements. The Examiner then cites Young as also describing a object-based command pipeline where an object resulting from the execution of one command is passed to a subsequent command.

[0040] In response, Applicant notes that claim 1 has been significantly amended. As described above with regard to Snover, claim 1 now recites data types that are “not natively supported by the operating environment”, objects which require resolving to data types, the retrieving of extended information that defines the data types not natively supported by the operating environment, and the creating of an instance of the data types.

[0041] Like Snover, Murray and Young fail to teach or suggest any of these features. While these features are similar to ones recited by previous versions of claims 2 and 3, the passages of Murray and Young cited as disclosing claims 2 and 3 do not disclose any of the new recitations added to claim 1. Rather, they simply describe (1) run-time grammar files which hold specifications of a command vocabulary (Murray, paragraph 76) and (2) a mapping function between “basic actions” and “CLIActions” (Murray, paragraph 67). Neither the grammar file nor the mapping function is described as having anything to do with data types that are not supported by the operating environment or the retrieval of extended information that defines such data types, nor their subsequent instantiation. In fact, the grammar file seems to define *supported* data types. Thus, no mention is made at any point in the combined references of unsupported data types, the retrieval of information defining such types, or their instantiation.

[0042] To establish a case of *prima facie* obviousness, the combined references must be shown to teach or suggest every claimed feature. For the above reasons, Murray and Young fail to meet this burden. Accordingly, Applicant asks the Examiner to withdraw the rejection of this claim.

Independent Claims 14 and 19

[0043] Claims 14 and 19 recite features similar to those of amended claim 1. Accordingly, at least for the same reasons described above with regard to claim 1, claims 14 and 19 are patentable over Murray and Young.

Dependent Claims 2-11, 13, 15-18, and 20-23

[0044] These claims ultimately depend upon independent claims 1, 14, and 19. As discussed above, claims 1, 14, and 19 are allowable. It is axiomatic that any dependent claim which depends from an allowable base claim is also allowable. Additionally, some or all of these claims may also be allowable for additional independent reasons.

Conclusion

[0045] All pending claims are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the application. If any issues remain that prevent issuance of this application, the **Examiner is urged to contact me before issuing a subsequent Action.** Please call/email me or my assistant at your convenience.

Respectfully Submitted,

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